



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,572	02/04/2005	Markku Kyytsonen	BERGPAT-7	5127
36528	7590	09/22/2006	EXAMINER	
STIENNON & STIENNON 612 W. MAIN ST., SUITE 201 P.O. BOX 1667 MADISON, WI 53701-1667			NGUYEN, JIMMY T	
			ART UNIT	PAPER NUMBER
			3725	

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/516,572

Applicant(s)

KYYTSONEN, MARKKU

Examiner

Jimmy T. Nguyen

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-21 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-17 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/2/04; 2/4/05; 3/24/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I (claims 9-17 and 21) in the reply filed on August 14, 2006 is acknowledged; an action on the merits follows.

Information Disclosure Statement

Receipt is acknowledged of the Information Disclosure Statements (I.D.S.), filed December 02, 2004, February 4, 2005, and March 24, 2005, which I.D.S. have been placed of record in the file. The initialed, signed and dated copy of the forms PTO-1449 are attached to this Office action.

Drawings

The drawings are objected to because the lead line of reference number 4;41 as shown in figure 1 is pointed to the bearing housing instead of the roll. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

Art Unit: 3725

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

In paragraph 24, line 2, numeral "4; 42" appears to be a typo error and it should be changed to --- 4; 43 --- because figure 1 shows the roll 4; 43 is the middlemost intermediate roll that is attached directly to the calender frame 7.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-17 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 9, lines 11-12, the limitation “between polymer-coated rolls and metal rolls” implies that there are at least four rolls. However, there are only three rolls are being claimed, which are the first roll, the second roll, and the first intermediate roll. Therefore, the limitation “between polymer-coated rolls and metal rolls” renders the claim indefinite.

Regarding claim 9, lines 12-13, the limitation “any” renders the claim indefinite because there is only one roll nip between the first roll and the first intermediate roll.

Regarding claim 9, line 16, the limitation “any” renders the claim indefinite because there is only one roll nip between the last roll and the first intermediate roll.

Regarding claim 11, lines 1-2, it is unclear whether the limitation “each second intermediate roll” is referring to the intermediate roll as claimed in claim 10, line 2 or it is referring to a different intermediate roll. Clarification is required. If it is referring to the same roll, it is suggested that the word “said” be added before the word “each”.

Regarding claim 11, lines 3-4, the words “the said rolls” is confusing and it is suggested that the word “the” should be deleted. Additionally, it is unclear of which rolls the applicant is referring to. Clarification is required.

Regarding claim 11, line 3, there is insufficient antecedent basis for the limitation “the own gravity” in the claim.

Regarding claim 12, lines 1-2, there is insufficient antecedent basis for the limitation “the load distribution” in the claim.

Regarding claim 13, line 3, the words “the said rolls” is confusing and it is suggested that the word “the” should be deleted. Additionally, it is unclear of which roll the applicant is referring to. Clarification is required.

Regarding claim 15, line 3, the words "the said roll" is confusing and it is suggested that the word "the" should be deleted. Additionally, it is unclear of which roll the applicant is referring to. Clarification is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-17, as best understood, and claim 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stotz (US 4,736,678) in view of Holopainen et al. (hereinafter "Holopainen") (WO 01/16424A1).

Regarding claims 9 Stotz discloses a first set of rolls (1a) attached to a first frame (6), the first set of rolls having a first roll 12(1), a last roll (12(3), and a first intermediate roll (1a) (i.e. the next to last roll as shown in figure 1) between the first roll and the last roll, wherein the first roll and the last roll, each having casing (11) which is movable with respect to a portion (13) fixed to the first frame (fig. 1), and each having an internal loading device (3a) with which the casing is movable toward the first intermediate roll (col. 6, lines 2-9), the first intermediate roll being rotatable (i.e. moveable up and down by the adjustment motor (30)) about an axis (at the ref. number (17a) which is fixed with respect to the frame (fig. 1); and a plurality of roll nips is defined between the rolls of the first set of rolls (fig. 1). As to the first and last rolls are polymer coated rolls and the rolls from the first roll to the last roll alternate between polymer-coated rolls

Art Unit: 3725

and metal roll, Stotz discloses the rolls from the first roll to the last roll alternate between the rolls having movable jacket (11) and metal roll (fig. 1). Stotz does not disclose the movable jacket is polymer coated. However, the patent to Holopainen, in a calendaring art, teaches a calender having rolls from a first roll (1) to a last roll (10) alternate between rolls having movable jacket (11) and metal rolls (2 and 8) (page 11, lines 14-15), wherein the rolls with the movable jacket are provided with a polymer coating (page 11, lines 12-13) in order to better print quality. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the rolls having movable jacket of Stotz with polymer coating, as taught by Holopainen, in order to better print quality.

Regarding claim 10, Stotz discloses each second intermediate roll (1a) (i.e. the second and third rolls from the top down as shown in figure 1) having an axis (i.e. at its bearing) which is movable with respect to the frame (fig. 1), each second intermediate roll being positioned between the first intermediate roll and the first roll (fig. 1).

Regarding claim 11, Stotz discloses said each second intermediate roll has equipment (17) for lightened its weight.

Regarding claims 12-14, Stotz discloses an additional load (by the elements 3a or 3) to the first roll (12(1)) and an additional load (by the elements 3a or 3) to the last roll (12(3)) (see figure 1), the additional load is brought to the first roll using a loading element (3, 1a) outside of the first roll. Stotz discloses the loading element is a roll (1a).

Regarding claim 15, Stotz discloses the additional load is brought to the first roll using the internal loading device (3a) of the last roll.

Art Unit: 3725

Regarding claims 16 and 17, Stotz discloses that first and last rolls are controlled deflection rolls (col. 5, line 62). The Examiner take Official notice that is it old and well known in the calendaring art that controlled deflection roll is a shoe roll comprises one or more shoe elements located under the casing of the roll as evidenced on page 4, lines 1-5 of the Holopainen reference.

Regarding claim 21, Stotz discloses a frame (6); a first intermediate roll (i.e. the fifth roll from the top down in figure 1) which is rotatable about an axis (17a) which is fixed with respect to the frame (fig. 1); a first roll (12(1)) is movable with respect to a portion (13) fixed to the frame, and the first roll having an internal loading device (3a) with which the casing is movable toward the first intermediate roll (col. 6, lines 2-9); a last roll (12(3)) is movable with respect to a portion (i.e. it stationary beam (13)) fixed to the frame (fig. 1), the last roll having an internal loading device (3a) with which the casing is movable toward the intermediate roll (fig. 1), wherein the first intermediate roll is positioned between the first roll and the last roll (fig. 1); at least one second intermediate roll (i.e. the second roll down from the top in fig. 1) positioned between the first roll and the first intermediate roll (fig. 1), and at least one second intermediate roll (i.e. the sixth roll down from the top) positioned between the first intermediate roll and the last roll, each second intermediate roll having an axis (at the reference number (16)) which is movable with respect to the frame (fig. 1); and a plurality of roll nips (fig. 1) defined between the rolls. As to the first and last rolls are polymer coated rolls and the rolls from the first roll to the last roll alternate between polymer-coated rolls and metal rolls, Stotz discloses the rolls from the first roll to the last roll alternate between the rolls having movable jacket (11) and metal rolls (fig. 1). Stotz does not disclose the movable jacket is polymer coated. However, the patent to

Art Unit: 3725

Holopainen, in a calendaring art, teaches a calender having rolls from a first roll (1) to a last roll (10) alternate between rolls having movable jacket (11) and metal rolls (2 and 8) (page 11, lines 14-15), wherein the rolls with the movable jacket are provided with a polymer coating (page 11, lines 12-13) in order to better print quality. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the rolls having movable jacket of Stotz with polymer coating, as taught by Holopainen, in order to better print quality.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art listed on the attached PTO 892 are cited to show relevant calenders.

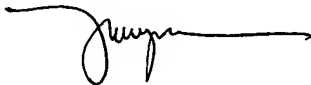
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy T. Nguyen whose telephone number is (571) 272-4520. The examiner can normally be reached on Mon-Thur 8:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272- 4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JTNguyen
September 10, 2006



JIMMY T. NGUYEN
EXAMINER - AU 3725